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10/696,458	10/29/2003	William E. Slack	PO-7963/MD-02-111	6016

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/696,458
Filing Date: October 29, 2003
Appellant(s): SLACK ET AL.

Lyndanne Whalen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 28, 2007 appealing from the Office action mailed January 24, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. 6,515,125 Slack et al. 2-2003

Oertel; Polyurethane Handbook, Chemistry - Raw Materials - Processing - Application - Properties, Second Edition; Hanser Publishers; New York; 1994; p. 90.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Issue A: Obviousness Type Double Patenting Rejection

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-22 of U.S. Patent No. 6,515,125 in view of Oertel (page 90).

The claims of U.S Patent 6,515,125 are drawn to storage stable prepolymers containing a mixed trimer of toluene diisocyanate and a polyisocyanate of the diphenylmethane series, wherein the prepolymer contains a NCO group content that meets appellants' claimed NCO group content and is produced from isocyanate reactants and hydroxy-functional reactants that meet those of appellants. The claims of U.S. Patent 6,515,125 differ from the claims of the instant application in that the claims of the patent fail to recite the presence of allophanate groups; however, the position is taken that the patent's claims encompass products that contain allophanate groups and processes wherein allophanate products are produced, because the process of the patent's claims yielding the aforementioned products encompasses reaction conditions that yield allophanate groups. The specification of the patent clearly recites at column 8, lines 23 and 24 that the temperature at which the hydroxy-functional reactant is reacted may be 120°C, and it is noted that Oertel clearly teaches that allophanates may be produced in the absence of a catalyst at temperatures of about 120°C.

Issues B and C: 35 USC 102(a or e)/35 USC 103 Rejection

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Slack et al. ('125), in view of Oertel (page 90).

Slack et al. disclose storage stable prepolymers containing a mixed trimer of toluene diisocyanate and a polyisocyanate of the diphenylmethane series, wherein the prepolymer contains a NCO group content that meets appellants' claimed NCO group content and is produced from isocyanate reactants and hydroxy-functional reactants that meet those of appellants. Slack et al. fail to recite the presence of allophanate groups; however, the position is taken that Slack et al. encompass products that contain allophanate groups and processes wherein allophanate products are produced, because the process yielding the aforementioned products encompasses reaction conditions that yield allophanate groups. The specification of the patent clearly recites at column 8, lines 23 and 24 that the temperature at which the hydroxy-functional reactant is reacted may be 120°C, and it is noted that Oertel clearly teaches that allophanates may

be produced in the absence of a catalyst at temperatures of about 120°C. Therefore, the position is taken that the process of Slack et al., even in the absence of a catalyst, operates under temperature conditions wherein the resulting products inherently contain allophanate groups.

Alternatively, even if not rising to the level of anticipation, the position is taken that it would have been obvious to incorporate allophanate groups for their art recognized functions and advantages into Slack et al. simply by operating at the upper end of the aforementioned disclosed temperature range, in view of the aforementioned disclosure within Oertel.

(10) Response to Argument

Response to Arguments Concerning Issue A

Firstly, appellants argue that Slack et al. sought to avoid the presence of allophanate groups in the trimers from which the disclosed prepolymers were made; therefore, one skilled in the art reading Slack et al. and Oertel would not consider it obvious to combine the teachings of Slack et al. with Oertel or any other disclosure directed to allophanates. In response, appellants fail to appreciate the fact that Oertel has been relied upon simply to reinforce the examiner's position that operating at the upper end of the temperature conditions of Slack et al. yields allophanate groups. Furthermore, appellants' statement that Slack et al. sought and produced trimers which did not include modifications, such as urethane, allophanate, or carbodiimide groups fails to address the central issue that process conditions are set forth that will yield the argued allophanate groups, regardless of whether they are desired or not. Appellants have failed to establish in light of the evidence, with respect to the process conditions, that the argued reaction products of the patent do not contain allophanate groups. It is noted that appellants'

claims fail to set forth any required amount of allophanate groups; they are simply required to be present to some unspecified extent.

Secondly, appellants argue that neither the claims of Slack et al. nor Oertel teach a partial trimerization and allophanation product formed in the presence of a hydroxyl compound as required by appellants. In response, despite appellants' argument, the fact remains that claim 11 of Slack et al. specifically claims the reaction of trimerized polyisocyanates with hydroxyl compounds, and the position is taken that the disclosed conditions of the reaction are such that at the upper end of the disclosed temperature range, allophanates groups will be produced as a result of the reaction.

Response to Arguments Concerning Issues B and C

Appellants have argued that neither Slack et al. nor Oertel disclose a partially trimerized and allophanized polyisocyanate, and accordingly, the teachings of Slack et al. and Oertel cannot be combined in any manner which would disclose appellants' claimed partially trimerized and allophanized polyisocyanates to those skilled in the art. Appellants further argue that it is clear from the teachings of Slack et al. that Slack et al. sought and found a way to achieve a liquid trimer which did not include allophanate groups. In response, appellants' argument has been considered; however, the argument fails to resolve the issue that patentees are considered to disclose a process that when practiced at the upper end of the disclosed temperature range will inherently yield products containing a quantity of allophanate groups. Again, it is noted that appellants' claims fail to set forth any required amount of allophanate groups; they are simply required to be present to some unspecified extent. Oertel has been relied upon as evidence that such reactions occur within Slack et al.'s disclosed temperature range in the absence of catalyst.

Appellants refer to the disclosure within Slack et al. that indicates that the products of Slack et al. can be made without the need to include other modifications such as allophanate groups; however, this disclosure is by no means definitive in stating that allophanate groups are not produced by the process under the argued conditions. Therefore, given the evidence of record, the position is taken that appellants have failed to establish that the products of Slack et al. do not contain the argued allophanate groups.

Appellants have directed the Board's attention to the fact that the instant process claims have been allowed by the examiner. Appellants argue that this allowance reflects a difference between the processing conditions taught by Slack et al. and the processing conditions used to produce appellants' composition. In response, it is not seen that this issue is material to the issues at hand. The issue at hand does not pertain to the differences in the respective processes, rather it pertains to obtaining a patentably indistinct product from two different processes.

Appellants have further argued that one would have to ignore the argued teaching within Slack et al. at column 4, lines 28-32, if he were going to combine the teachings of Slack et al. with those of Oertel in the manner suggested by the examiner. In response, it is not seen that the argued passage teaches away from the incorporation of an unspecified quantity of allophanate groups within the trimerized reaction product. Rather, the argued disclosure serves to teach that such modifications are not required to prevent solids formation at 25°C. One of ordinary skill in the art would simply conclude from the passage that the modifications are not required; on the other hand, one would not conclude that their exclusion is mandated. The position is maintained that there is nothing that precludes including allophanate groups for their art recognized purpose,

and there is nothing within the passage that teaches away from the argued combination of references.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

RABON SERGENT
PRIMARY EXAMINER

Conferees:

James Seidleck

Romulo Delmendo
Appeals Specialist